TEXAS EMISSIONS REDUCTION PLAN (TERP)

National Clean Cities Conference
May 14, 2002
Oklahoma City, OK

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Texas General Land Office

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Senate Bill 5/TERP
An Overview

- **TERP was created in 2001 by the 77th Texas Legislature to provide grants and other incentives for improving air quality throughout the state.**
- **TERP is administered by the TNRCC and a number of other state agencies and boards.**
- **TERP provides incentives, rebates, and grants for various types of clean air projects.**

Funding

- Fiscal note estimates funding at $133 million per year.
- 72% of funding for diesel reduction programs.
  - Not more than 3% for infrastructure projects.
  - Not more than 15% for on-road diesel purchases.
- 10% for the light-duty purchase and lease incentives.

Funding (con't)

- **7.5% for energy efficiency programs.**
- **7.5% for new technology and research (TCET).**
- **3.0% for administration.**

- **A lawsuit has prevented approximately 80% of the original funding from being collected.**

Light Duty Purchase and Lease Incentive Program

- **Takes effect August 2002.**
- **Provides a financial incentive to consumers who purchase or lease a new light-duty motor vehicle (LDV) certified by US EPA to the Tier II emission standards of Bin 4 through Bin 1.**
- **Incentives are offered statewide subject to availability of funding.**

Emission Standards and incentive Amount

Model Year 2003 through 2007

Emission Standards	Incentive Amount
Bin 4	$1,250
Bin 3	$2,225
Bin 2	$3,750
Bin 1	$5,000

Annual Consumer Brochure

- **Effective 9/1/02 manufacturers must publish brochure of eligible vehicles for Light-duty program.**
- **Brochure must contain Bin certification and EPA's Green Vehicle Guide information.**
- **Brochure must be placed in a visible location within the dealer's showroom.**

Brochure (cont.)

- **Manufacturers not intending to offer qualified LDVs for sale in Texas must publish a brochure providing this information.**

- **MY 2002 vehicles which meet Bin 4 and cleaner:**
  - **Ford CNG Crown Victoria Bin 3**
  - **Honda CNG Civic GX Bin 2**
  - **More vehicles expected for MY 2003**

Public School Logo Contest

- **A seventh grader from Wichita Falls, Texas submitted the winning entry in the Clean Vehicle Logo Contest.**

- **Her logo will be displayed on vehicles that meet the criteria of the Motor Vehicle Purchase or Lease Incentive Program and will represent Texas until 2008.**


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Heavy Duty Purchase and Lease Incentive Program

- **Provides a reimbursement of the incremental costs for the purchase or lease of a <u>new</u> heavy duty motor vehicle (HDV) certified by US EPA to a more stringent emission standard than required by federal laws.**

- **Incentives are offered statewide subject to availability of funding.**

Reimbursement Schedules

Vehicles manufactured 1/1/01 to 9/30/02

Nitrogen Oxide (NOx) Emission Standard	Cost Reimbursements
2.5 grams or less per brake horsepower-hour (g/bhp-hr)	Up to $15,000 of incremental costs
1.5 or less g/bhp-hr	Up to $25,000 of incremental costs

Reimbursement Schedules (cont.)

Vehicles manufactured 10/1/02 to 9/30/06

NOx Emission Standard	Cost Reimbursements
1.2 or less g/bhp-hr	Up to $15, 000 of incremental costs
0.5 or less g/bhp-hr	Up to $25,000 of incremental costs

Vehicle Eligibility Requirements

- **HDV must be purchased or leased on or after August 1, 2002.**
- **HDV must have a gross vehicle weight rating (GVWR) of 10,000 pounds or more.**
- **HDV must be certified by EPA according to specified emission standard requirements.**

Vehicle Eligibility Requirements (cont.)

- **HDV must be registered in the State of Texas.**
- **HDV must be operated for at least 75% of its annual mileage in Texas.**

Reimbursement Requirements

- **Only one reimbursement per vehicle.**
- **Incremental cost calculations based only on the cost of any optional equipment directly related to emissions requirement.**
- **Reimbursement will not exceed maximum specified dollar amounts.**

Reimbursement Requirements (con't)

- **Reimbursements for leased HDVs will be prorated based on an eight year lease term.**

- **Completed and signed Texas Application for Payee Identification Number (TIN) is required.**

Grant Programs

- **Projects (excluding demonstration projects) are subject to a $13,000/ton of NOx maximum cost effectiveness threshold.**
- **First and second round RFPs were for the Houston/Galveston and Dallas/Fort Worth Areas only.**
- **Third round will open sometime after September 2002.**

AFV Projects Recommended For Funding in 1st Round

- **LNG Refueling Infrastructure in DFW**
- **12 Retrofits to LNG for HEB Grocery in HGA**
- **Purchase of CNG Backhoe & Street Sweeper at DFW Airport**
- **27 Retrofits to LNG for SYSCO in HGA**
- **Alternative fuel projects are 45.6% of projects recommended for funding.**

2nd Round Funding

- **Recommendations to be announced in late May/early June.**
- **42 applications received requesting $17M.**

Incremental Costs

- **Grant programs pay for the incremental cost of cleaner equipment.**
- **Example:**
  - **To rebuild the existing diesel engine costs $5,000**
  - **To replace the existing diesel engine with a cleaner engine costs $20,000**
  - **TERP will pay $15,000 towards the purchase of the cleaner engine**
  - **$20,000 cost for the cleaner engine minus $5,000 baseline costs = incremental cost of $15,000**

New Purchase and Lease of Non-Road Equipment

- **Minimum of 50 horsepower.**
- **Limited to equipment which is self propelled and/or capable of being moved.**
- **Recreational and competitive equipment excluded.**
- **Will cover the incremental cost between the diesel powered and the cleaner equipment cost.**

New Purchase and Lease of Non-Road Equipment (con't)

- **Will cover cleaner equipment regardless of the fuel type.**
- **Equipment must operate 75% of the time in an affected county.**
- **Must be 30% cleaner for NOx than current year's standard.**
- **Must not exceed $13,000/ton of NOx reduced.**

Re-power of Existing On- & Non-Road Equipment

- **If re-powering with brand new engine, the engine must be certified to be 30% cleaner than current model year standards.**
- **If replacing an engine manufactured in 1988 or later, the newer or replacement engine must be 30% cleaner than the engine that was removed.**
- **If replacing an engine manufactured in 1987 or earlier, the newer, or replacement engine must be certified to be 50% cleaner than the engine that was removed.**
- **Must meet the $13,000/ton threshold.**

Off-Road Diesel Engine Standards g/bhp-hr NOx

Engine Power	Tier	Model Year	Emissions
50-100	Tier 0	1997 & older	13.0 max.
	Tier 1	1998 – 2003	6.9 (9.2kw)
	Tier 2	2004 – 2007	5.2 (7.0kw)
	Tier 3	2008+	3.3 (4.4kw)
100 –175	Tier 0	1996 & older	11.0 max.
	Tier 1	1997-2002	6.9 (9.2kw)
	Tier 2	2003-2006	4.5 (6.0kw)
	Tier 3	2007+	2.8 (3.7kw)
175 – 300	Tier 0	1995 & older	11.0 max
	Tier 1	1996 – 2002	6.9 (9.2kw)
	Tier 2	2003-2005	4.5 (6.0kw)
	Tier 3	2006+	2.8 (3.7kw)

Off Road Diesel Engine Standards g/bhp-hr NOx

Engine Power	Tier	Model Year	Emissions
300 –600	Tier 0	1995 & older	11.0 max.
	Tier 1	1996 – 2000	6.9 (9.2kw)
	Tier 2	2001 – 2005	4.5 (6.0kw
	Tier 3	2006+	2.8 (3.7kw)
600-750	Tier 0	1995 & older	11.0 max.
	Tier 1	1996-2001	6.9 (9.2kw)
	Tier 2	2002-2005	4.5 (6.0kw)
	Tier 3	2006+	2.8 (3.7kw)
750+	Tier 0	1999 & older	11.0 max
	Tier 1	2000	6.9 (9.2kw)
	Tier 2	2006+	4.5 (6.0kw)
	Tier 3	N/A	N/A

On-Road Heavy-Duty Standards

Model Year	Emission Standard NOx g/bhp-hr
1987 and earlier	10.0
1988 – 1990	6.0
1991 – 1997	5.0
1998 – Sept. 2002	4.0
October 2002+	2.4

Retrofit or Add-On of Existing On-Road and Non-Road Equipment

- **At the time of rebuild, retrofitting the engine with a "kit" that will allow it to achieve a 30% reduction from where the engine was originally certified.**
- **Adding on equipment to an existing engine which allow it to achieve a 30% reduction from where the engine was originally certified.**
- **Must meet the $13,000/ton threshold.**

Infrastructure Projects

- **Will pay for the costs of on-site refueling stations for qualifying fuel and/or recharging stations.**
- **Will pay for the costs of on-vehicle infrastructure projects to reduce propulsion engine emissions (idle emissions).**
- **Must meet the $13,000/ton threshold.**

Qualifying Fuels Projects

- **Will pay for incremental cost difference between a conventional fuel and a qualifying fuel.**
- **Contracts limited to 2 ½ years due to state fiscal policies, but there's no limit on applying for future grants.**
- **Must meet the $13,000/ton threshold.**

Demonstration Projects

- **Projects for demonstrating practical low emission re-power, retrofit and other advanced technologies for on-road heavy-duty vehicles and off road equipment.**
- **May include use of qualifying fuels for new engines and vehicles which have the potential to produce very low NOx emissions.**
- **Will pay for most costs associated with the project limited to a case by case determination.**

Summary

- **TERP/Senate Bill 5 is a great opportunity to dramatically improve air quality.**

- **TERP/Senate Bill 5 provides excellent opportunities for alternative fuels projects.**

Thank You!

- **Texas General Land Office**
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- **Texas Natural Resource Conservation Commission TERP Site**
  www.tnrcc.state.tx.us/oprd/sips/terp.html